



PATENT APPLICATION
Mo-6470
LeA 34,772

1645
#6
BP
6-25-02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION OF
EVA-MARIA FRANKEN ET AL
SERIAL NUMBER: 09/909,556
FILED: JULY 20, 2001
TITLE: LIGAND-BINDING DOMAIN OF
THE ULTRASPIRACLE (USP)
PROTEIN

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) GROUP NO.: 1645
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INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. 1.97(b)

Assistant Commissioner for Patents
Washington, D.C. 20231
Sir:

This disclosure statement under 37 CFR 1.97 & 1.98 is submitted before the first Office Action in order that the Patent and Trademark Office may consider the relevancy of certain information to the invention described and claimed in the subject application, and in compliance with the regulations concerning information disclosure statements, copies of documents listed on the attached Form PTO 1449 are enclosed.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an enveloped addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 6/13/02
Date

Joseph C. Gil, Reg. No. 26,602
Name of applicant, assignee or Registered Representative

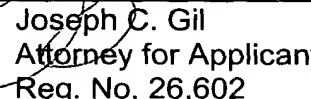
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Concise statements of the presently understood relevance of each of the documents are found in the specification filed.

This Information Disclosure Statement should not be construed as a representation that a search has been made, that additional information material to the examination of this application does not exist, that any document mentioned herein constitutes prior art, or that the documents listed severally or in any combination with one another or with any other information, are believed to render any claim in the subject application prima facie unpatentable.

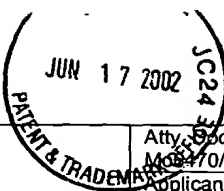
Respectfully submitted,

By



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		Applicant Eva-Maria Franken et al	
		Filing Date July 20, 2001	Group 1645

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							Yes	No*
	AL							
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	AN							
	AO							
	AP							

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	AR	Nature 347, pages 298-301, September 20, 1990, pages 298-301, "Relationship between the production of Drosophila ultraspiracle locus and the vertebrate retinoid X receptor", Anthony E. Oro, Michael McKeown and Ronald M. Evans
	AS	Current Opinion in Cell Biology 10, (month unavailable) 1998, page 384-391, "The nuclear receptor ligand-binding domain: structure and function", Dino Maras and Hinrich Gronemeyer
	AT	Recent Progress in Hormone Research, Vol. 49, (month unavailable) 1994, pages 167-195 "Steroid Receptors and Other Transcription Factors in Ecdysone Response", William A. Segraves

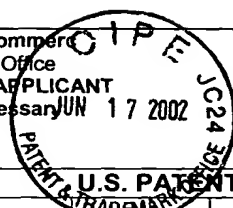
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	AL							
	AM							
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	AO							
	AP							

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	AR	Insect Biochem. Mol. Biol. 25(8), (month unavailable) 1995, pages 881-897, "Insect Nuclear Receptors: A Developmental and Comparative Perspective", Vincent C. Henrich and Neil E. Brown
	AS	Cell, Vol. 83, December 15, 1995, pages 871-877, "From Embryogenesis to Metamorphosis: The Regulation and Function of Drosophila Nuclear Receptor Superfamily Members", Carl S. Thummel
	AT	Science, Vol. 271, January 5, 1996, pages 40-41, "Ecdysis Control Sheds Another Layer," James W. Truman

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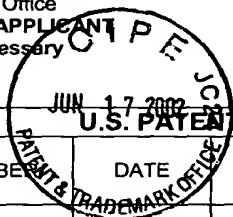
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	AO							
	AP							

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	AR	Nature, Vol. 366, December 2, 1993, pages 476-479, "Functional ecdysone receptor is the product of EcR and Ultraspiracle genes", Tso-Pang Yao, Barr Marc Forman, Zeyu Jiang, Lucy Cherbas, J.-Don Chen, Michael McKeown, Peter Cherbas & Ronald M. Evans
	AS	Development 125, (month unavailable) 1998, pages 4709-4717, "The RXR homolog Ultraspiracle is an essential component of the Drosophila ecdysone receptor," Bonnie L. Hall and Carl S. Thummel
	AT	Arch. Insect Biochem. Physiol. 41, (month unavailable) 1999, pages 99- 106, "The Ecdysone Receptor Puzzle", M. Lezzi, T. Bergman, J.-F Mouillet and V.C. Henrich

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	AP							

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	AR	J. Insect Physiol. Vol. 42, No. 10, (month unavailable) 1996, pages 937-941, "Ecdysteroid Receptor Binding Activity and Ecdysteroid Agonist Activity at the Level of Gene Expression are Correlated with the Activity of Dibenzoyl Hydrazines in Larvae of Bombyx mori", Kenichi Mikitani
	AS	Annu. Rev. Entomol. 43, (month unavailable) 1998, pages 545-569, "New Insecticides with Ecdysteroidal and Juvenile Hormone Activity", Tarlochan S. Dhadialla, Glenn R. Carlson and Dat P. Le
	AT	Insect Biochem. and Mol. Biol., 28, (month unavailable) 1998, pages 693-704, "Basis for selective action of a synthetic molting hormone agonist, RH-5992 on lepidopteran insects", M. Sundaram S.R. Palli, P.J. Krell, S.S. Sohi, T.S. Dhadialla, A. Retnakaran
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	AL							
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	AO							
	AP							

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	AR	J. Mol. Biol., 261(3), (month unavailable) 1996, pages 470-489, "A Fast Flexible Docking Method using an Incremental Construction Algorithm", Matthias Rarey, Bernd Kramer, Thomas Lengauer and Gerhard Klebe
	AS	J. Mol. Biol., 267, (month unavailable) 1997, pages 727-748, "Development and Validation of a Genetic Algorithm for Flexible Docking", Gareth Jones, Peter Willett, Robert C. Glen, Andrew R. Leach and Robin Taylor
	AT	J. Comp.-Aided Mol. Design, 6, (month unavailable) 1992, pages 593-606, "LUDI: rule-based automatic design of new substituents for enzyme inhibitor leads", Hans-Joachim Böhm

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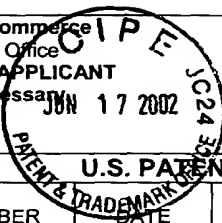
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	AO							
	AP							

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	AR	Tetrahedron, Vol. 47, No. 43, (month unavailable) 1991, pages 8985-8990, "Automatic Creation of Drug Candidate Structures Based on Receptor Structure. Starting Point for Artificial Lead Generation", Yoshihiko Nishibata and Akiko Itai
	AS	Proteins: Structure, Function and Genetics, 11 (4), (month unavailable) 1991, pages 314-328, "Computer Design of Bioactive Molecules: A Method for Receptor-Based de Novo Ligand Design", Joseph B. Moon and W. Jeffrey Howe
	AT	Methods in Enzymology, Vol. 276, (month unavailable) 1997, pages 307-326, "Processing of X-Ray Diffraction Data Collected in Oscillation Mode", Zbyszek Otwinowski and Wlodek Minor
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	AO							
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OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	AR	Acta Cryst., A50 (month unavailable) 1994, pages 157-163, "AMoRe; an Automated Package for Molecular Replacement", J. Navaza
	AS	EMBO Journal, Vol. 19, No. 11, (month unavailable) 2000, pages 2592-2601, "Crystal structure of the human RXR α ligand-binding domain bound to its natural ligand 9- <i>cis</i> retinoic acid", Pascal F. Egea, André Mitschler, Natacha Rochel, Marc Ruff, Pierre Chambon and Dino Moras
	AT	Acta Cryst., A47, (month unavailable) 1991, pages 110-119, "Improved Methods for Building Protein Models in Electron Density Maps and the Location of Errors in these Models", T.A. Jones, J.-Y Zou and S.W. Cowan

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	AR	Acta Cryst., D53, (month unavailable) 1997, pages 448-455, "wARP: Improvement and Extension Of Crystallographic Phases by Weighted Averaging of Multiple-Refined Dummy Atomic Models", Anastassis Perrakis, Titia K. Sixma, Keith S. Wilson and Victor S. Lamzin
	AS	Acta Cryst., D54, (month unavailable) 1998, page 905-921, "Crystallography & NMR System: A New Software Suite for Macromolecular Structure Determination", Axel T. Brünger, Paul D. Adams, G. Marius Clore, Warren L. DeLano, Piet Gros, Ralf W. Grosse-Kunstleve, Jian-Sheng Jiang, John Kuszewski, Michael Nilges, Navraj S. Pannu, Randy J. Read, Luke M. Rice, Thomas Simonson and Gregory L. Warren
	AT	J. Appl. Crystallogr. 26, (month unavailable) 1993, pages 283-291, "PROCHECK: a program to check the stereochemical quality of protein structures", Roman A. Laskowski, Malcolm W. MacArthur, David S. Moss and Janet M. Thornton

EXAMINER

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